

# A R T I C L E S

## Energy Communities in EU Energy Regulation

by

Jakub Mikołaj Kmiec\*

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### *Abstract*

EU Directives included in the ‘Clean Energy for All Europeans’ package introduced Renewable Energy Communities ECs (RECs) and Citizen ECs (CECs) into the legal framework, sharing commonalities, but with distinctions. The aim of this paper is to examine whether EU law provides for a single model of ECs or, in fact, two distinct models, and to characterize ECs as new participants in the energy market. The publication focuses on the field of legal studies and includes a literature review, an interpretation of EU provisions defining ECs, a characterization of ECs as new

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\* Jakub Kmiec, M.A., PhD Candidate in Law, University of Silesia, Katowice (Poland); e-mail: jakub.kmiec@us.edu.pl; ORCID: <https://orcid.org/0000-0003-4131-3751>.

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market participants, and a case study. The paper concludes that EU law indeed encompasses two models of ECs – RECs and CECs. The characterization of ECs as participants in the energy market is complex, and the case study illustrates that significant differences can exist among different examples of ECs, influencing their legal characteristics.

### *Resumé*

Les directives du paquet “Clean Energy for All Europeans” ont introduit les communautés d’énergies renouvelables et les communautés d’énergie citoyenne dans le cadre juridique de l’UE, partageant des caractéristiques communes mais présentant également des différences. Cette publication examine si le droit de l’UE prévoit un modèle unique ou deux modèles distincts de communautés d’énergie, et caractérise ces communautés comme de nouveaux participants sur le marché de l’énergie. Elle se concentre sur le domaine juridique, comprenant une revue de littérature, une interprétation des dispositions, une caractérisation et une étude de cas, ainsi qu’une discussion et des conclusions. Selon les conclusions, le droit de l’UE englobe deux modèles de communautés d’énergie. La caractérisation des communautés d’énergie en tant que participants sur le marché est complexe, avec d’importantes différences entre les exemples, influençant leurs caractéristiques juridiques.

**Key words:** ECs; renewable ECs; citizen ECs; energy regulation; renewable energy sources.

**JEL:** K23, K32

## I. Introduction

One of the primary objectives of the European Union (EU) in implementing its energy policy is the effective execution of the energy transition, which entails a consistent shift away from emission-intensive energy sources, towards low-emission and renewable sources. Renewable energy constitutes a pivotal element of the European Green Deal’s<sup>1</sup> commitment to achieving climate neutrality in the EU region by 2050. While the transformation goals are set at both the EU and Member State levels, the energy transition is also occurring concurrently at the local level, indicating the decentralization of energy production.<sup>2</sup>

The decentralization of the energy sector is closely associated with the concept of energy citizenship. This concept has been progressively gaining

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<sup>1</sup> Communication from the European Commission, The European Green Deal, COM (2019) 640.

<sup>2</sup> Bartłomiej Nowak, *Wewnętrzny rynek energii w UE* (1st edn, C.H. Beck 2009) 64–99.

popularity<sup>3</sup> and, in accordance with its fundamental principle, emphasizes the active involvement of private individuals, organizations, institutions, and non-energy sector enterprises in the generation of energy, its transmission and management.<sup>4</sup> Citizens not only participate in technological aspects, but also contribute to democratic decision-making processes concerning energy matters.<sup>5</sup> Consequently, the activation of end-users forms the cornerstone of the new public policy in the energy sector, shaping regulatory trends in national legislations.<sup>6</sup>

Within the realm of energy citizenship, the EU's energy policy increasingly highlights the collaboration among end-users, which is further facilitated by the implementation of the European Green Deal policy. Research conducted on the legislative package titled the Clean Energy for All Europeans package<sup>7</sup> reveals that joint initiatives undertaken by groups of end-users can serve various purposes, including enabling energy sharing, and collectively balancing the local energy market from technical and commercial perspectives.<sup>8</sup>

One prominent form of such joint initiatives is the establishment of **Energy Communities** (hereinafter: ECs). These are defined as collective frameworks for energy generation activities, which revolve around principles of openness, democracy, and shared governance, ultimately benefiting their members and/or the local community.<sup>9</sup> The notion of ECs should be associated with the concept of 'community energy'. This conceptual category encompasses projects in which social groups, whether defined by geographical locations

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<sup>3</sup> For a more comprehensive exploration of the intensifying interest in decentralized energy, see Madeleine Wahlund and Jenny Palm, 'The role of energy democracy and energy citizenship for participatory energy transitions: A comprehensive review' (2022) 87 *Energy Research & Social Science* <<https://doi.org/10.1016/j.erss.2021.102482>> accessed 4 July 2023.

<sup>4</sup> Anna Dyląg, Andrzej Kassenberg, and Wojciech Szymalski, 'Energetyka obywatelska w Polsce – analiza stanu i rekomendacje do rozwoju' (2019) Instytut na rzecz ekorozwoju 11.

<sup>5</sup> Patrick Devine-Wright, 'Energy citizenship: psychological aspects of evolution in sustainable energy technologies' (2012) in Joseph Murphy (ed.), *Governing technology for sustainability* (Earthscan 2012) 63–86.

<sup>6</sup> Tomasz Długosz, 'Społeczności energetyczne z pakietu dyrektyw «Czysta energia dla wszystkich Europejczyków»' (2022) 1(69) *Forum Prawnicze* 44.

<sup>7</sup> Further information on the package can be found on the European Commission's website: <[https://energy.ec.europa.eu/topics/energy-strategy/clean-energy-all-europeans-package\\_en](https://energy.ec.europa.eu/topics/energy-strategy/clean-energy-all-europeans-package_en)> accessed 31 July 2023.

<sup>8</sup> Karen R.S. Hamann, Maria P. Bertel, Bożena Ryszawska et al., 'An interdisciplinary understanding of energy citizenship: Integrating psychological, legal, and economic perspectives on a citizen-centred sustainable energy transition' (2023) 97 *Energy Research & Social Science* <<https://www.sciencedirect.com/science/article/pii/S2214629623000191>> accessed 6 July 2023; Długosz (n 6).

<sup>9</sup> Aura Caramizaru and Andreas Uihlein, 'Energy communities: an overview of energy and social innovation' (2020) Publications Office of the European Union <[doi:10.2760/180576/JRC119433](https://doi.org/10.2760/180576/JRC119433)> accessed 3 July 2023.

or shared interests, exhibit a high degree of ownership, control, and mutual benefits derived from project outcomes.<sup>10</sup>

This publication aims to examine whether EU law encompasses a single model, or in fact two distinct models of ECs, and to characterize ECs as participants in the energy market.

Preliminary research has led to the formulation of a research hypothesis suggesting that EU law provides for two models of ECs. These models share several common features, including the application of fundamental structural elements. However, they also possess distinguishing characteristics that differentiate one model of ECs from the other. Consequently, the characterization of ECs as market participants necessitates a specific approach.

The article is structured as follows: firstly, it contains a concise presentation of relevant sources on the topic, accompanied by a description of the research methodology. Subsequently, the discussion delves into the legal framework of ECs within EU law. Preliminary information is provided, encompassing the theoretical and historical aspects of regulations governing ECs. This is followed by a comparative analysis of the regulatory frameworks applicable to ECs, employing a three-element definition as the analytical framework. Part IV focuses on the characterization of ECs as participants in the energy market. The case study subsection of Part IV aims to classify the entities Ecopower CV and the Isle of Eigg Heritage Trust and its subsidiary energy company, as ECs of a particular type. The publication concludes with a comprehensive discussion and final conclusions.

## II. Literature review, methodology

During the development of this article, sources such as legal acts, views and communications of EU bodies, academic publications and websites were used.

The interest in the topic of ECs has greatly increased from the end of the first decade of the 21<sup>st</sup> Century and to the present day. The issue of ECs is considered to not be fully explored by research yet. The existing state of knowledge is the result of research from various fields, including social sciences, technical sciences, and legal sciences – an area into which this article also falls. The current state of knowledge covers topics such as motivations for establishing and joining ECs,<sup>11</sup> social acceptance of ECs, specific technological resources installed in ECs,

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<sup>10</sup> Gill Seyfang, Jung Jin Park, Adrian Smith, 'A Thousand Flowers Blooming? An Examination of Community Energy in the UK' (2013) 61 Energy Policy <<https://doi.org/10.1016/j.enpol.2013.06.030>> accessed 4 July 2023.

<sup>11</sup> Thomas Bauwens, Boris Gotchev and Lars Holstenkamp, 'What drives the development of community energy in Europe? The case of wind power cooperatives' (2016) 13, Energy Research & Social Science 136–147.

active actors and social networks necessary for ECs, and special cooperation in transitioning between entities, sectors, and systems.<sup>12</sup> The conducted legal research on ECs includes topics such as the transposition of EU rules on ECs into national legal systems,<sup>13</sup> the role of ECs in the energy transition process,<sup>14</sup> activities undertaken by ECs,<sup>15</sup> and business models for ECs.<sup>16</sup>

<sup>12</sup> As regards scientific papers of an overview nature, see Grigorios L. Kyriakopoulos, 'Energy Communities Overview: Managerial Policies, Economic Aspects, Technologies, and Models' (2022) 15(11) *Journal of Risk Financial Management* <<https://doi.org/10.3390/jrfm15110521>> accessed 3 July 2023; for a detailed analysis of comparative research on energy communities literature, see Maria Luisa Lode, Geert te Boveldt, Thierry Coosemans and Luis Ramirez Camargo, 'A transition perspective on Energy Communities: A systematic literature review and research agenda' (2022) 163 *Renewable and Sustainable Energy Reviews* <<https://doi.org/10.1016/j.rser.2022.112479>> accessed 3 July 2023; Lia Gruber, Udo Bachhiesl and Sonja Wogrin, 'The current state of research on energy Communities' (2021) 138(8), *Elektrotechnik und Informationstechnik* 515–524; in terms of future research agenda, see Julia Blasch, Nicolien M. van der Grijp, Daniel Petrovics et al., 'New clean energy communities in polycentric settings: Four avenues for future research' (2021) 82 *Energy Research & Social Science* <<https://doi.org/10.1016/j.erss.2021.102276>> accessed 3 July 2023.

<sup>13</sup> Maciej M. Sokolowski, 'Renewable and citizen energy communities in the European Union: how (not) to regulate community energy in national laws and policies' (2020) 38(3) *Journal of Energy & Natural Resources Law* 289–304; Maciej M. Sokolowski, 'European Law on the Energy Communities: A Long Way to a Direct Legal Framework' (2018) 27(2) *European Energy and Environmental Law Review* 60–70; Christina E. Hoicka, Jens Lowitzsch, Marie Claire Brisbois et al., 'Implementing a just renewable energy transition: Policy advice for transposing the new European rules for renewable energy communities' (2021) 156 *Energy Policy* <<https://doi.org/10.1016/j.enpol.2021.112435>> accessed 3 July 2023; Josh Roberts, 'What energy communities need from regulation' (2019) 8 <<https://doi.org/10.4337/eej.2019.03-04.01>> accessed 3 July 2023.

<sup>14</sup> Iñigo Capellán-Pérez, Álvaro Campos-Celador and Jon Terés-Zubiaga, 'Renewable Energy Cooperatives as an instrument towards the energy transition in Spain' (2018) 123 *Energy Policy* 215–229; Francesca Cappellaro, Gianluca D'Agosta, Piero De Sabbata et al., 'Implementing energy transition and SDGs targets throughout energy community schemes' (2022) 8(1) *Journal of Urban Ecology* <<https://doi.org/10.1093/jue/juac023>> accessed 3 July 2023; Florian Hanke and Rachel Guyet, 'The struggle of energy communities to enhance energy justice: insights from 113 German cases' (2023) 13 *Energy, Sustainability and Society* <<https://energysustainsoc.biomedcentral.com/articles/10.1186/s13705-023-00388-2>> accessed 3 July 2023.

<sup>15</sup> E.g., energy production, energy sharing; see Lea Diestelmeier, Viola Cappell, 'Conceptualizing 'Energy Sharing' as an Activity of 'Energy Communities' under EU Law: Towards Social Benefits for Consumers?' (2023) 12(1) *Journal of European Consumer and Market Law* 15–23; Francesco Demetrio Minuto, Andrea Lanzini, 'Energy-sharing mechanisms for energy community members under different asset ownership schemes and user demand profiles' (2022) 168(C) *Renewable and Sustainable Energy Reviews* <[10.1016/j.rser.2022.112859](https://doi.org/10.1016/j.rser.2022.112859)> accessed 3 July 2023; in terms of Energy management, see Sobhan Dorahaki, Masoud Rashidinejad, Seyed Farshad Fatemi Ardestani et al., 'An integrated model for citizen energy communities and renewable energy communities based on clean energy package: A two-stage risk-based approach' (2023) 277 *Energy* <<https://doi.org/10.1016/j.energy.2023.127727>> accessed 3 July 2023.

<sup>16</sup> Merla Kubli and Sanket Puranik, 'A typology of business models for energy communities: Current and emerging design options' (2023) 176 *Renewable and Sustainable Energy Reviews* <<https://doi.org/10.1016/j.rser.2023.113165>> accessed 3 July 2023; Inês F.G. Reis,

Currently, there is only one book available on the market dedicated specifically to ECs.<sup>17</sup> However, a number of reports have been published by team members of organisations such as the European Commission's Joint Research Centre<sup>18</sup> and REScoop.eu<sup>19</sup> (that is, the European federation of citizen energy cooperatives).

Information was also gathered from the Internet, using information from websites such as [energy.ec.europa.eu](http://energy.ec.europa.eu) and [rescoop.eu](http://rescoop.eu), as well as from the websites of particular ECs. Search terms used in web browsers, databases and electronic catalogues of scientific publications include: Renewable Energy Community, Citizen Energy Community, Energy Communities, Energy cooperatives.

The research was carried out using a dogmatic-legal method allowing the analysis of EU legislation on ECs. A complementary role was played by the theoretical method, which made it possible to identify doctrinal standpoints and analyse legally non-binding documents.

The preliminary results of the research led to the conclusion that the subject of ECs generates constant scientific interest from many areas. It should be noted, however, that the topic of ECs has not been fully explored yet, including in the area of legal sciences.

### III. ECs in EU law

#### 1. Introduction to ECs

Community energy initiatives are not a new phenomenon – they date back to the 19th Century.<sup>20</sup> The first ECs in Europe were established as early as the 1970s. One of the first such initiatives was the non-governmental Danish

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Ivo Gonçalves, Marta A.R. Lopes et al., 'Business models for energy communities: A review of key issues and trends' (2021) 144(C) *Renewable and Sustainable Energy Reviews* <10.1016/j.rser.2021.111013> accessed 3 July 2023; Anne-Lorène Vernay, Carine Sebi and Fabrice Arroyo, 'Energy community business models and their impact on the energy transition: Lessons learnt from France' (2023) 175 *Energy Policy* <<https://doi.org/10.1016/j.enpol.2023.113473>> accessed 3 July 2023.

<sup>17</sup> Sabine Loebbe, Fereidoon Sioshansi, David Robinson, *Energy Communities. Customer-Centered, Market-Driven, Welfare-Enhancing?* (1st supp, 1th edn, Academic Press, Elsevier, 2022).

<sup>18</sup> <[https://joint-research-centre.ec.europa.eu/jrc-mission-statement-work-programme\\_en](https://joint-research-centre.ec.europa.eu/jrc-mission-statement-work-programme_en)> accessed 3 July 2023; Caramizaru and Uihlein (n 9).

<sup>19</sup> Compare, in particular, the numerous publications in the 'toolbox' section <<https://www.rescoop.eu/>> accessed 3 July 2023.

<sup>20</sup> Renewable Energy Policy Network for the 21st Century, *Renewables 2016 Global Status Report* <<https://www.ren21.net/gsr-2016/chapter07.php>> accessed 21 February 2023.

Wind Turbine Owners' Association, founded in 1978 in Denmark.<sup>21</sup> It is an independent association whose aim is to look after the common interests of wind turbine owners *vis-à-vis* authorities, policy makers, utilities and wind turbine manufacturers.<sup>22</sup> In the following years, further initiatives categorised as ECs were established in European countries.

Community energy initiatives, due to their social and environmental benefits, have been supported by the EU for decades,<sup>23</sup> although their development progressed for many years even without dedicated EU legislation. One of the first announcements of a change in the regulatory environment was the European Commission Communication Clean Energy for All Europeans – unlocking Europe's growth potential, announced in late 2016.<sup>24</sup> The Communication announced that consumers are active and central players on the energy markets of the future' and they will have 'the possibility to produce and sell their own electricity'.

These policy statements on ECs have been put into the EU legal framework by two acts, namely Directive on common rules for the internal market for electricity<sup>25</sup> (hereinafter: Directive 2019/944) and Directive on the promotion of the use of energy from renewable sources<sup>26</sup> (hereinafter: RED II Directive). Directive 2019/944 introduced **Citizen Energy Communities** (hereinafter: **CECs**) into the EU legal order, while the RED II Directive introduced **Renewable Energy Communities** (hereinafter: **RECs**). Each Member State is obliged to transpose these two Directives effectively into its national legal order, while retaining the freedom to choose the means of such transposition. The deadlines for transposing both Directives have already expired.<sup>27</sup> Some

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<sup>21</sup> The entity still operates under the changed name Green Power Denmark på <<https://greenpowerdenmark.dk/>> accessed 21 February 2023.

<sup>22</sup> The website entry under the name Danmarks Vindmølleforening (Danish Wind Turbine Owners' Association) on the Energy Institute Knowledge Service <<https://knowledge.energyinst.org/search/record?id=3957>> accessed 21 February 2023.

<sup>23</sup> Lena Kitzing, Catherine Mitchell and Poul Erik Morthorst, 'Renewable energy policies in Europe: Converging or diverging?' (2012) 51(C) Energy Policy 192–201.

<sup>24</sup> European Commission Press release, Clean Energy for All Europeans – unlocking Europe's growth potential (2016).

<sup>25</sup> Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (OJ L 158/125) (Directive 2019/944).

<sup>26</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast) (OJ L 328/82) (REC II).

<sup>27</sup> Refer to Art. 26 RED II (transposition deadline: 30 June 2021) and Art. 71 Directive 2019/944 (transposition deadline 31 December 2020).

Member States have successfully transposed the required provisions related to ECs, while others have not yet done so.<sup>28</sup>

The choice of an EU directive as a legal regulatory tool results in a diversity of models for the operation of ECs in national legislation. The law of each EU Member State regulates aspects such as the permissible organisational and legal forms of operation of ECs (e.g. cooperative, foundation, limited company), the territorial scope of their activities (e.g. the area of one or several municipalities, the requirement to keep short distances between energy consumers and producers), or the requirements of technical nature (e.g. the obligation to connect member producers and consumers within one distribution network operator, the obligation to cover an appropriate share of demand with energy from renewable sources). At the same time, the EU legislature has stipulated that the required provisions on ECs do not exclude the existence of other ‘citizen energy initiatives’, with ECs being recognised as a category of cooperation between citizens or local actors that are subject to recognition and protection under Union law.<sup>29</sup>

A significant portion of the two Directives’ provisions is addressed to EU Member States, obligating them to ensure minimum standards for the regulation of ECs (e.g., through rules requiring the establishment of favourable regulatory frameworks,<sup>30</sup> and mandating the monitoring and evaluation of existing barriers and development potential<sup>31</sup>). The two Directives have introduced into the EU legal framework a set of distinctive and shared characteristics for ECs.

## 2. Definitional elements of ECs

Both of the aforementioned Directives, which introduce the concept of RECs and CECs into the EU legal framework, contain similar definitional elements. This has created the potential for viewing these initiatives collectively. However, the interpretation of certain definitional norms of RECs or CECs suggests that they should be regarded as two distinct models of ECs.

In terms of the structural organization of these legal acts, the EU legislator provided one definitional provision and one Article (divided into points and

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<sup>28</sup> In order to compare the state of implementation, see ‘Transposition tracker – Definitions’ tool <<https://www.rescoop.eu/transposition-tracker>> accessed 6 July 2023.

<sup>29</sup> Compare recital 44 to Directive 2019/944. Although the recital refers to the CEC, in view of its functional interpretation (the aim is to approve, authorize and ensure the functioning of various types of so-called citizens’ initiatives), it should be equally applicable to the REC.

<sup>30</sup> For example, refer to Article 16(1) and (3) Directive 2019/944.

<sup>31</sup> For example, refer to Article 22(3) RED II.



sub-points) containing more detailed rules for each of the mentioned types of ECs, addressed to ECs themselves, to Member States, or to energy market participants.

First and foremost, the EU legislator determined that both RECs and CECs are legal entities. Each Member State legislation may regulate the rules for acquiring legal personality differently, but the effective implementation of the Directives requires equipping national ECs with the attributes of a legal personality, manifested in the ability to be subject to rights and obligations, as well as to undertake legal acts on their own behalf. Therefore, a given 'citizen initiative' cannot be assigned to the category of REC or CEC if it lacks legal personality. This is a *sine qua non* condition for ECs.

Definitions of ECs consist of three elements:

1. Definition of the catalogue of actors participating in them, and the rules of participation.
2. Specification of the benefits catalogue ECs should provide.
3. Specification of the activities catalogue and territorial extension of ECs.

Regarding the **principles of participation**, a common aspect for RECs and CECs is the reliance on the involvement of small, local entities, including those belonging to the local government sector. In the case of RECs, eligible members or shareholders include individuals, SMEs, and local authorities, including municipalities. In the case of CECs, members or shareholders can be individuals, local government authorities (including municipalities) or small enterprises. The main difference lies in the group of entrepreneurs. Based on the literal wording of the EU provisions, so-called medium-sized enterprises cannot be members or shareholders of CECs, although they can participate in RECs. However, Recital 44 of Directive 2019/944 presents a less conservative position in this regard suggesting that membership in CECs should be open to entities of all categories. Further limitations outlined in the mentioned recital are not aimed at restricting membership based on certain categories of entities, but rather at limiting their decision-making rights if they are members of ECs.<sup>32</sup>

Both models are based on open and voluntary participation. Openness and voluntariness of participation are interconnected, as restricting one component negatively affects the ability to achieve the other. Participation in renewable energy projects should be open to all potential local members and be based on objective, transparent and non-discriminatory criteria.<sup>33</sup> ECs should be as

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<sup>32</sup> In Recital 44 Directive 2019/944, reference is made to the decision-making powers within a CEC, which should be limited to those members or shareholders that are not engaged in large-scale commercial activity, and for whom the energy sector does not constitute a primary area of economic activity.

<sup>33</sup> Recital 71 RED II.

open as possible, but that does not mean there are no conditions for joining these structures.<sup>34</sup> The two Directives do not impose a specific numerical limit on the number of members or shareholders. The Directives also ensure the freedom to withdraw from an EC. These principles form the basis of the internal aspect of the **voluntary and open participation principle**.

The external aspect of this principle entails enabling ECs to operate within the energy system and facilitating their market integration. Other participants in the energy market, primarily those professionally involved in the energy sector (including distribution system operators and energy trading companies), should enable and support ECs in achieving their goals.

Another principle regarding ECs is the **principle of independence**. RECs should be able to remain independent from individual members and other traditional market participants, who participate in the community as members or shareholders or who collaborate with it through other means, such as investments.<sup>35</sup> A correct understanding of the independence principle is necessary for the prevention of abuses, and for ensuring the broad participation of local entities in ECs. Independence, however, does not imply exclusivity or separation from other energy market participants. ECs are expected to closely cooperate with other market participants, and their independence is crucial to ensure two-way collaboration, and to eliminate the possibility of influence exerted by other market participants leading to dominance and subordination.

Equally important is the **principle of effective control**. The principle of control is so significant that it constitutes a defining element within the definitions. Both CECs and RECs are required to be ‘effectively controlled by their members or shareholders.’<sup>36</sup> Member States have implementation flexibility in this regard, ensuring ‘effective control’ through the most efficient legal instruments within their legal systems.

There are two aspects to consider here: the **subject aspect of control** (who possesses control rights) and the **object aspect** (which areas of ECs’ activities are subject to control and what actions or legal acts constitute control activities). In terms of the subject aspect, the EU legislator determined that control rights are vested in members or shareholders. When comparing RECs and CECs, it is important to note that different criteria have been applied to identify the entities endowed with control rights. In the case of RECs, control rights are granted only to members or shareholders ‘located in the proximity of the renewable energy projects that are owned and developed

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<sup>34</sup> Maciej M. Sokołowski, ‘Renewable and citizen energy communities in the European Union: how (not) to regulate community energy in national laws and policies’ (n 13) 298.

<sup>35</sup> *Ibidem*.

<sup>36</sup> Compare the definition of REC in Art. 2(16) RED II with the definition of CEC found in Art. 2(11) Directive 2019/944.

by that legal entity' satisfying a geographical criterion. On the other hand, CECs are effectively controlled by members or shareholders who are 'natural persons, local authorities, including municipalities, or small enterprises' fulfilling a subjective criterion rather than a geographical one.

In the interpretation of the subjective criterion, Recital 44 of Directive 2019/944 plays a significant role. According to this recital, 'decision-making powers within a citizen energy community should be limited to those members or shareholders that are not engaged in large-scale commercial activity and for which the energy sector does not constitute a primary area of economic activity.' The 'decision-making powers' belong to smaller entities not involved in professional energy activities. Medium and large enterprises (both from the energy sector and beyond) can participate in a CEC and contribute to its decision-making, 'as long as their decision-making role does not amount to effective control or direction of the decision-making of the CEC.'<sup>37</sup>

In the definition of control set out in Directive 2019/944, the object aspect is emphasized. Control, according to Article 2(56) of Directive 2019/944, means 'rights, contracts or other means which, either separately or in combination and having regard to the considerations of fact or law involved, confer the possibility of exercising decisive influence on an undertaking, in particular by:

- (a) ownership or the right to use all or part of the assets of an undertaking;
- (b) rights or contracts which confer decisive influence on the composition, voting or decisions of the organs of an undertaking.'

This definition *per se* covers only the relationships within an EC and pertains to the means of exerting decisive influence over its activities. However, the interpretation of such defined control, in conjunction with other provisions governing the criteria for endowing individual members with control rights, as well as in conjunction with the principle of independence, also has implications for the characterization of an EC as a new market participant, and its relationships with other energy market participants.

The catalogue of circumstances that enable the exertion of decisive influence over ECs is an open list. Therefore, other circumstances, such as contractual provisions with other energy market participants (e.g. regarding distribution services, energy supply services, sale, or lease of energy generation facilities), must also be taken into account, and may determine the final composition of an EC's members, as well as the selection of partners providing complementary services to the EC.

This broader interpretation acknowledges that control over an EC is not limited solely to internal dynamics but extends to external factors and

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<sup>37</sup> REScoop.eu, 'Energy Communities under the Clean Energy Package. Transposition Guidance' (2020) <<https://www.rescoop.eu/news-and-events/press/energy-communities-under-the-clean-energy-package>> accessed 5 July 2023 31.

relationships with other market participants. The specific circumstances and contractual arrangements can play a significant role in shaping the characteristics of an EC, and its interactions within the energy market.

The second element of the definition of ECs pertains to the identification of the benefits that ECs should provide. Both Directives state that the primary purpose of ECs is to provide ‘environmental, economic, or social benefits to their shareholders, members, or local areas in which they operate’. It is clear that their main objective is not profit generation. In doctrine, there is a strong recommendation to adopt concrete provisions in national legislations that exclude profit-driven entities from the category of ECs.<sup>38</sup> However, the generation of financial profits by an EC is not excluded, and it will not determine non-compliance with the EU definitional criteria of CECs or RECs for a given entity, as long as the pursuit of financial profits is not its primary purpose.

Regarding the benefits catalogue, environmental benefits may include, for example, the reduction of CO<sub>2</sub> emissions and pollutants within the operational area of an EC, or the implementation of energy efficiency projects. Economic benefits can encompass reduced energy bills for community members, or the ability to purchase necessary energy resources (such as pellets) at prices lower than market rates. The range of activities generating social benefits is very broad and includes e.g. supporting individuals that are at risk of energy poverty, as well as educational meetings on energy efficiency, among other examples.

In practice, the majority of activities that generate environmental, economic, or social benefits will require financial resources. Some of these activities may reduce expenses (e.g., energy efficiency projects) or increase revenue (e.g., selling generated energy), leading to financial profits. How should an EC handle the profits generated from its operational activities?

It appears that financial profits of an EC should be reinvested in the activities of the respective community – profits should be allocated towards actions that deliver the discussed social, environmental, or economic benefits. However, it seems plausible that the profits could also be distributed among members in the form of dividends. The exact manner of profit allocation should be determined by the community’s internal governance structures, ensuring a fair and transparent distribution process that aligns with the community’s objectives and the interests of its members.

The third element of the definition pertains to the scope and territorial extent of the activities conducted by ECs. RECs are limited to operating within the renewable energy sector, whereas CECs have the ability to operate

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<sup>38</sup> Sokołowski, ‘Renewable and citizen energy communities in the European Union: how (not) to regulate community energy in national laws and policies’ (n 14) 299.

in both the renewable energy and conventional energy sectors. This distinction is a key difference between these two types of communities.

By definition, RECs engage in ‘renewable energy projects that are owned and developed by that legal entity’. Their activities can encompass areas such as renewable energy production, consumption, storage, and sale. This includes engaging in agreements for the purchase of renewable electricity, and the sharing of energy within the community. On the other hand, the scope of activities of CECs extends to energy distribution, aggregation, energy efficiency services, or electric vehicle charging. The list of activities of CECs is open-ended, in contrast to the exhaustive list applicable to REC.

Regarding the territorial scope of activities, ECs are expected to operate locally, within specific local areas (in the case of CECs), or in close proximity to projects concerning renewable energy owned and developed by a given legal entity (in the case of RECs). The EU legislator does not impose administrative territorial constraints in this regard. It is the operators and members of an EC who determine the specific scope and area of operation, as long as it falls within the defined range of activities. The choice of the operational area should be tailored and functional for each individual EC, allowing them to achieve the maximum environmental, economic, and social benefits within their territorial jurisdiction.

The outlined definitional elements allow for the assessment of whether a particular initiative can be classified as an EC or not. They also highlight the emphasis placed by the EU legislator on specific aspects of ECs, such as their activities, internal structure, and corporate framework. This sheds light on the priorities of EU law in shaping ECs, and the aspects that are promoted and encouraged.

#### **IV. ECs as participants in the energy market**

ECs are relatively new entities under EU law, and their legal nature and role in the energy market are not yet fully understood. The abovementioned EU Directives require ECs to have legal personality, making them separate entities from their members or shareholders. They are granted non-discriminatory access to all relevant energy markets, both directly and through aggregation.<sup>39</sup> Thus, they are recognized as participants in the energy market.<sup>40</sup>

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<sup>39</sup> Art. 22(2)(c) RED II as well as Art. 16(3)(b) Directive 2019/944.

<sup>40</sup> Compare the definition of market participant as provided in Art. 2(25) of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity OJ L158/54.

## 1. Characteristics of ECs as participants in the energy market

As a new type of market entity, ECs activate, and group together previously passive market participants, such as residential consumers, small-scale consumers, and small energy producers, such as small businesses. This distinguishes them structurally from other market participants, as they bring together distinct legal entities that were primarily not active and did not engage in activities within the energy sector.

ECs operate with the purpose of providing environmental, social, and economic benefits – their primary goal cannot be financial gain. This sets them apart from other market participants in economic terms, as the primary focus of the latter are profit-oriented commercial activities. One of the activities of ECs that is not primarily focused on financial gain, but which does bring economic benefits, is energy sharing, which is a distinctive activity specific to ECs as the participants in the energy market. Energy companies provide energy supplies in exchange for remuneration for the services of distribution or energy supply. However, energy sharing is a separate activity from the regular supply of energy and does not have to take the form of a commercial transaction, because it does not necessarily imply contractual reciprocity.<sup>41</sup>

Another characteristic feature of ECs, distinguishing them, for example, from energy producers, is their primary focus on creating local energy self-sufficiency areas, instead of producing as much energy as possible. The goals of ECs are aligned with the sustainable development goals, such as affordable and clean energy, sustainable cities and communities, as well as responsible energy consumption and production.<sup>42</sup> The objectives of ECs are more oriented towards achieving sustainable development goals, rather than pursuing financial profits (which is the primary focus of energy companies – maximizing profit, for example, through maximizing the sale of generated energy, while minimizing the operating costs).

According to Directives, ECs are participants of a particular type in the energy market. They are ‘treated in a non-discriminatory and proportionate manner with regard to their activities, rights and obligations as final customers, producers, suppliers, distribution system operators or market participants engaged in aggregation.’<sup>43</sup> At the same time, alongside provisions ensuring the participation of ECs in the energy market, as well as promoting their activities, the Directives impose obligations upon them, which also affect other energy market participants. Member States ensure that ECs are subject to non-discriminatory, fair, proportionate and transparent procedures and

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<sup>41</sup> Diestelmeier, Cappell (n 16).

<sup>42</sup> Cappellaro, D’Agosta, De Sabbata et al. (n 15).

<sup>43</sup> Art. 16(3)(b) Directive 2019/944.

charges, including those concerning registration and licensing, as well as to transparent, non-discriminatory and cost-reflective networks, ensuring that they contribute in an adequate and balanced way to the overall cost sharing of the system.<sup>44</sup> In light of the participation of ECs in the energy market, the rights and obligations imposed on them must ensure the integration of this new type of market participant into the energy system. Therefore, the law must, on the one hand, support and promote these initiatives, providing incentives for their further development, and, on the other hand, balance the interests of the entire energy sector by imposing certain obligations on ECs.

RECs and CECs, on the one hand, can engage in activities related to energy generation, supply, storage, and distribution, and, on the other hand, they can link members and shareholders who themselves operate in these areas. Members of RECs and CECs can also include entities from the energy sector (although their control and decision-making powers are legally limited). This structure poses a risk of monopolization of the local energy market coordinated by an EC. Therefore, the Directives contain provisions to prevent the emergence of monopolized local energy markets. Manifesting the preventive action of the EU legislator are provisions concerning the engagement of ECs in energy distribution. The distribution activities carried out by ECs must take place without prejudice to the principles and regulations applicable to distribution system operators.<sup>45</sup> It seems that Directive 2019/944 implies, in particular, the application of the **unbundling principle** and the **principle of third party access** to distribution activities carried out by ECs. In addition to having access to the network, and the ability to choose service providers in the energy market, ECs themselves must adhere to these principles whenever they provide distribution services to their members or other entities.

However, the EU legislator did not provide a precise specification of to what extent these principles should be applied to ECs. Firstly, these principles apply to energy companies ('electricity undertakings' in the meaning of Directive 2019/944). Operating a company, including an energy company, involves conducting activities aimed at generating financial profits. The primary objective of ECs' activities cannot be the pursuit of such profits, but rather the generation of the aforementioned benefits. Secondly, a key organizational feature of ECs is their separate legal personality from their members. An EC (organized in a permissible form under the respective national legislation, e.g. a cooperative) can independently engage in activities such as energy distribution. Therefore, ECs will be obliged to maintain the unbundling principle between its distribution activities and its other activities related to generation, storage, and energy supply. That seems to be clear. However, the question is – how to apply

<sup>44</sup> Art. 16(1)(e) Directive 2019/944; compare also similar Art. 22(4)(d) RED II.

<sup>45</sup> Art. 16(4) Directive 2019/944.

the unbundling principle between the activities undertaken by an EC (having a separate legal personality from its members) and the activities undertaken by the members of that EC? Can a producer or supplier of energy be a member of such an EC? Would the membership in such an entity not circumvent the law, and violate the fundamental principles of the legal structure of the energy market? Currently, the level of development of European ECs allows them to benefit from the unbundling exemptions for entities serving fewer than 100,000 connected customers, which have been introduced in many EU Member States. However, the dynamic development of some ECs may necessitate practical solutions to the outlined problem in the future.<sup>46</sup>

## 2. Case studies

ECs form new networks of relationships among entities located within their operational areas. These entities establish ECs to pursue their energy-related interests. The formation of an EC results in these entities becoming indirect beneficiaries of the rights conferred upon ECs by the two Directives and by national legislation. By acting collectively, these entities can achieve benefits that would be unattainable if each entity were to operate individually. Such benefits include, but are not limited to, the opportunity for energy sharing, peer-to-peer trading, and joint investment ventures. However, in practice, the scope of operations, number of members, organizational structure, and activities undertaken in the energy market can vary significantly among different examples of ECs. These factors determine the classification of an institution as a specific type of ECs and have implications for its characteristics as an energy market participant. The following case study aims to illustrate these differences, which are important in understanding the profile of a particular EC as a participant in the energy market.

### 2.1. Ecopower

ECs are closely tied to local-level activities and the collaboration of citizens and small businesses. These initiatives arise as grassroots, voluntary actions of the local community. However, this does not diminish their significance, both from the perspective of the energy market and its participants. Ecopower CV is a cooperative company established in Belgium with the purpose of investing in renewable energy and promoting rational energy use. Its main activities in the energy market encompass energy generation and supply. The values

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<sup>46</sup> For example, the energy cooperative Ecopower CV, based in Belgium, had over 64,000 members-shareholders in 2021.



driving Ecopower CV align with the objectives of ECs, as the cooperative aims to create social, ecological, and economic added value for its members and the community.<sup>47</sup> The territorial scope of Ecopower CV covers the Flanders region, thus subjecting it to regional laws and regulations. According to the data presented at the general meeting for the 2022 financial year, held in May 2023, a total of 105 GWh of electricity was supplied to 55,422 customers that had been generated from wind, photovoltaic, and hydropower installations<sup>48</sup> owned by the cooperative (with each member having a stake in these installations).

This EC can be classified as a REC under the definition provided by RED II and the Flemish Energy Decree.<sup>49</sup> The activities carried out by Ecopower CV align with the requirements set for the *hernieuwbare-energiegemeenschap* (The equivalent of REC in Flemish legislation), as its energy generation and supply activities ‘relate to green electricity from an installation directly or indirectly connected via the connection of partners or members of the renewable energy community’.<sup>50</sup> The cooperative structure ensures that members have appropriate control rights as defined in the statutes of Ecopower CV and Belgian law. Each member holds a specified and limited number of shares, as determined by the statute. Each Ecopower CV share has a value of 250 euros, and each member can hold a maximum of 20 shares. According to Article 32 of the Statute of Ecopower CV, voting rights at the General Assembly adhere to the principle of ‘one associate – one vote.’<sup>51</sup> The statutory objectives align with the benefits that REC aims to achieve (provision of environmental, economic or social benefits to the members).<sup>52</sup> Moreover, the temporary suspension of new member registrations, due to technical limitations of the energy-generating installations under the control of Ecopower CV, reflects a commitment to the realization of sustainable development goals.<sup>53</sup>

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<sup>47</sup> Art. 5 of the Statute of Ecopower CV <<https://www.ecopower.be/statuten-en-intern-reglement>> accessed 5 July 2023.

<sup>48</sup> Total capacity in use: wind – 131.25 MWe, Photovoltaic – 4.29 MWe, Hydropower – 75 kW; source – Ecopower CV, Productie-installaties <<https://www.ecopower.be/over-ecopower/productie-installaties>> accessed 5 July 2023. According to the information provided on the cooperative’s website, many members of the cooperative also have photovoltaic installations on the roofs of their homes.

<sup>49</sup> Decree containing general provisions on energy policy (Law of 15 May 2009) <<https://codex.vlaanderen.be/portals/codex/documenten/1018092.html>> accessed 5 July 2023.

<sup>50</sup> Art. 4.8.4 of the Flemish Energy Decree.

<sup>51</sup> Art. 32 of the Statute of Ecopower CV <<https://www.ecopower.be/statuten-en-intern-reglement>> accessed 5 July 2023.

<sup>52</sup> Compare Art. 4.8.1 of the Flemish Energy Decree with Art. 5 of the Statute of Ecopower CV.

<sup>53</sup> Communication ‘Temporary contract stop at Ecopower’ <<https://www.ecopower.be/groene-stroom/aanvraag>> accessed 5 July 2023; compare also Art. 4.8.2 § 1 of the Flemish Energy Decree whereby REC limits participation based on technical or geographic proximity,

The level of development of this EC can be considered as advanced, and the presented numbers are impressive. The obtained data does not indicate that Ecopower CV is engaged in energy distribution activities, and there is also no information about a specific member conducting distribution activities. However, the hypothetical inclusion of such a member in the cooperative, while providing distribution services to other cooperative members, or the provision of distribution services by the cooperative itself, raises certain concerns. In both scenarios, there is a risk of refusals to connect to the grid of non-member entities located within the territorial scope of the cooperative's activities. This entails a significant risk of applying non-competitive connection fees and distribution charges, as well as risks surrounding actual priority in connecting installations owned by the cooperative, while conflicts between particular interests of individual cooperative members are increasing. Considering the dynamic development of this EC, the occurrence of the aforementioned risks in the future could potentially pose challenges for the power system of Flanders.<sup>54</sup>

## 2.2. Isle of Eigg

A different example of a small, local, island-based EC from Scotland is the Isle of Eigg Heritage Trust, which is the sole owner of Eigg Electric Ltd.<sup>55</sup> The size of the community stands at just under 100 people.<sup>56</sup> The aim of the island community was to create an off-grid energy generation, supply and distribution system under the management of Eigg Electric Ltd. The island is not connected to the mainland electricity supply network, however, 'after decades of diesel generators, Eigg Electric provided 24-hour power for the first time in February 2008.'<sup>57</sup> The company generates renewable energy from three hydroelectric generators, four small 6 kW wind turbines, and a 170 kW photovoltaic array that harnesses solar power. These renewable sources meet approximately 95% of the island's electricity demand. The remaining 5% is generated by two 64 kW diesel generators. The energy is distributed through a high voltage grid, which is also managed by Eigg Electric Ltd. Additionally,

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taking into account the function of the objectives or activities the renewable energy community aims to achieve.

<sup>54</sup> According to data from January 2020, Ecopower CV supplied approximately 1.64% of household electricity in Flanders; source Friends of the Earth Europe, 'The Belgian Community That Built Renewable Energy for the Masses' (2020) <<https://friendsoftheearth.eu/news/the-belgian-community-that-built-renewable-energy-for-the-masses/>> accessed 6 July 2023.

<sup>55</sup> Caramizaru and Uihlein (n 9) 19.

<sup>56</sup> About Eigg <<http://isleofeigg.org/>> accessed 5 July 2023.

<sup>57</sup> Eigg Electric <<http://isleofeigg.org/eigg-electric/>> accessed 5 July 2023.

the community has a coordinated energy storage system in the form of a bank of batteries, capable of supplying power to the entire island for up to 24 hours. The environmental and social goals of the Isle of Eigg Heritage Trust are clearly articulated in the statement – ‘No more pouring smelly and expensive diesel into noisy generators, just clean, reliable electricity for everyone.’<sup>58</sup> This highlights the commitment of the community to reducing reliance on fossil fuels, improving environmental conditions, and providing a reliable and sustainable energy supply for that community.

This EC can be classified as a CEC. Its members consist of citizens and small businesses, with a maximum electricity supply cap of 10 kW.<sup>59</sup> The goals of the organization align with the objectives of a CEC, as they promote self-sufficiency primarily from renewable sources. However, the energy balance is complemented by conventional sources, specifically diesel generators. The members of the Isle of Eigg Heritage Trust have appropriate control rights as outlined in its Articles of Association, according to which ‘all members shall have equal voting rights at any General Meeting.’<sup>60</sup> The commitment to realizing sustainable development goals is clearly evident. The establishment of power capacity limits within the community, along with the design of generation facilities and energy storage for self-consumption purposes (while ensuring the security of energy supply through the selection of complementary generation installations) serves as an alignment with the sustainable development goals, as well as an ideal example of a sustainable approach to local energy.

Due to the extremely limited scope of its operation and a small number of customers (residents), it is understandable that the principle of unbundling between energy generation, supply, and distribution does not apply here. Eigg Electric Ltd. effectively operates as a monopoly in the energy market, but remains under the management of the local community, providing a wide range of services to meet their needs. Due to the ownership structure of the entity managing the energy on the island, and the limited number of entities using its energy generation, supply, and distribution services, the absence of unbundling between these activities does not intuitively raise objections.

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<sup>58</sup> *Ibidem*.

<sup>59</sup> *Ibidem*.

<sup>60</sup> Compare Art. 4(b) in fine of the Articles of Association of The Isle Of Eigg Heritage Trust <<http://www.isleofeigg.org/wp-content/uploads/2016/12/IEHT-Memo-Arts.pdf>> accessed 5 July 2023.

## V. Discussion and conclusions

ECs are a relatively new instrument in EU energy law. They serve as a means of implementing EU energy policy by organizing the energy market at the local level, empowering citizens in energy generation and local energy market control, as well as promoting economic activity and entrepreneurship in the local energy sector.

The conducted analysis leads to the conclusion that CECs and RECs should be perceived as two distinct forms of ECs. Although they share common features, CECs and RECs should not be regarded as a single model regulated by two distinct legal acts. Both CECs and RECs have distinct attributes and focus that set them apart. RECs primarily focus on renewable energy sources and promoting their utilization, while CECs place greater emphasis on organizing community activities, and managing relationships with other market participants, such as distribution companies. Nevertheless, the interpretation of specific provisions in the Directives regulating CECs and RECs will be consistent and generally applicable to ECs as market participants.

The legal nature of ECs as participants in the energy market is heterogeneous and can vary depending on the type of activities they engage in. The legal character of participation in the energy market may be influenced by the organizational structure of an EC, as well as by the capital and decision-making relationships among its members or shareholders.

The case studies presented above lead to the conclusion that differences in terms of scale of operations, number of members, technologies employed, and organizational forms, can be significant, allowing for customization based on specific cases in order to maximize the benefits. At the same time, the characteristics of a given EC require a different perspective when considering its role as a participant in the relevant energy market, and it also influences perceptions related to the risk of monopolistic practices in local energy markets.

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